YAMPOL'SKAYA, S.A. (L'vov)

Cementomas of heterotopic (extramaxillary) localization. Arkh. pat. no.10:54-56 '64. (MIRA 18:10)

1. Kafedra patologicheskoy anatomii (zav.- prof. Ye.I. Pal'chevskiy) L'vovskogo meditsinskogo instituta.

Cand. Sci. Tech.

YAMPOL'SKAYA, T. G.

Dissertation: "Basic Principles of Selecting the Road Pavements for Inhabited Localities of the USSR."

18 Oct. 49

Academy of Communal Economy

imeni K. D. Pamfilov

SO Vecheryaya Moskva
Sum 71

YAMPOL'SKAYA, T.G.

GUREVICH,L.V.; YAMPOL'SKAYA,T.G.; MURZAYEVA,L.B.; KHRUNOV,N.P., redaktor; OTOCHEVA,M.A., redaktor; PETROVSKAYA,Ye., tekhnicheskiy redaktor

[Road traffic signs] Dorozhnye signal'nye znaki. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR, 1955. 46 p. (MLRA 9:2)
(Traffic regulations)

YAMPOL'SKAYA, T.G.

K-9

USSR/Optics - Physiotogical Optics

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13180

Author : Gurtovoy, G.K., Gurevich, L.V., Murzayeva, L.B., Seletskaya, L.I., Yampol'skaya, T.G.

Inst : -

Title : Investigation of the Laws of Color and Three Dimensional Visions and Their Use for Increasing the Effectiveness of Road Signals.

Orig Pub : Tr. In-ta biol. fiz. AN SSSR, 1955, 1, 136-157

Abstract : Starting with the premise that the problems of visibility of road signals are insufficiently well developed, the authors have undertaken an extensive investigation of the influence of such factors, as the shape of the signs, the combination of colors of the image on the sign and of the background, the dimension of the sign, and its illumination. As a total the following recommendations were made: (1) With respect to the shape -- rectangle (1:4 to 1:10),

Card 1/2

YAMPOL'SKAYA, T. G

TUIAYEV, A., kand.tekhn.nauk; YAMPOL'SKAYA, T., kand.tekhn.nauk.

Make wider use of local materials in road construction. Zhil.-kom. khoz. 8 no.2:14-15 '58. (MIRA 11:2)
(Road materials)

GOL'TSMAN, Lyubov' Naumovna; kand.ekonom.nauk; ZAVADSKAYA, Irina Yevseyevna, kand.ekonom.nauk; ORLOVA, Raisa Il'inichna, nauchnyy sotrudnik; YAMPOL'SKAYA, Tat'yana Georgiyevna, kand.tekhn.nauk; KHOLMOGOROVA, T.A., red.izd-va; SHLIKHT, A.A., tekhn.red.

[Maintaining city streets] Voprosy ekspluatatsii gorodskikh dorog. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1959. 88 p. (MIRA 12:11)

(Streets--Maintenance and repair)

S/141/60/003/005/026/026
E140/E335

AUTHORS: Ivanova, I.M., Ketkov, Yu.L. and Yampol'skaya, T.S.

TITLE: On the Existence of Barker Codes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1960, Vol. 3, No. 5, pp. 911 - 913

TEXT: Given the matrix on p. 911, where each element has the value ± 1, a Barker code is given by the first line a_1, a_2, ..., a_n of the matrix, if conditions 1) and 2) :

$$1) \quad S(A_i) = 0 \qquad (i = 1, 2, \ldots) ;$$

$$2) \quad |S(N_i)| = 1 \qquad (i = 0, 1, 2, \ldots)$$

are satisfied, where the notation $S(N_i)$ indicates the sum of all elements in the diagonal N_i. Several properties of the matrix are discussed, after which it is shown that for

Card 1/4

S/141/60/003/005/026/026
E140/E335

On the Existence of Barker Codes

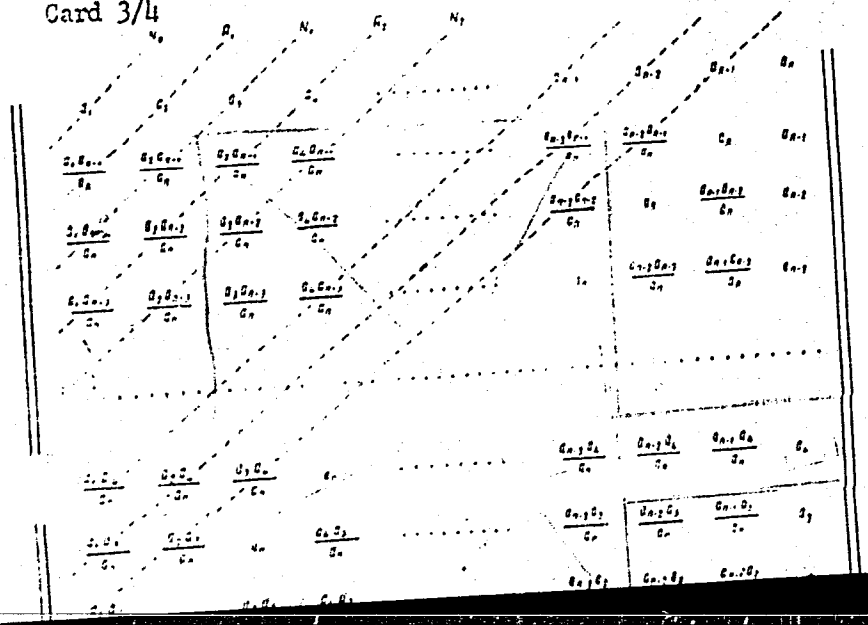
It has also been found that Barker codes for $n = 4k \pm 1$, $n = 4k + 2$ $(k = 1, 2, \ldots)$ the Barker code does not exist. $n > 13$, and for $n = 8, 12, 16, 20,$ do not exist. The question of existence of Barker codes for the case $n = 4k$, $k > 5$ remains open.
There is 1 Soviet reference.

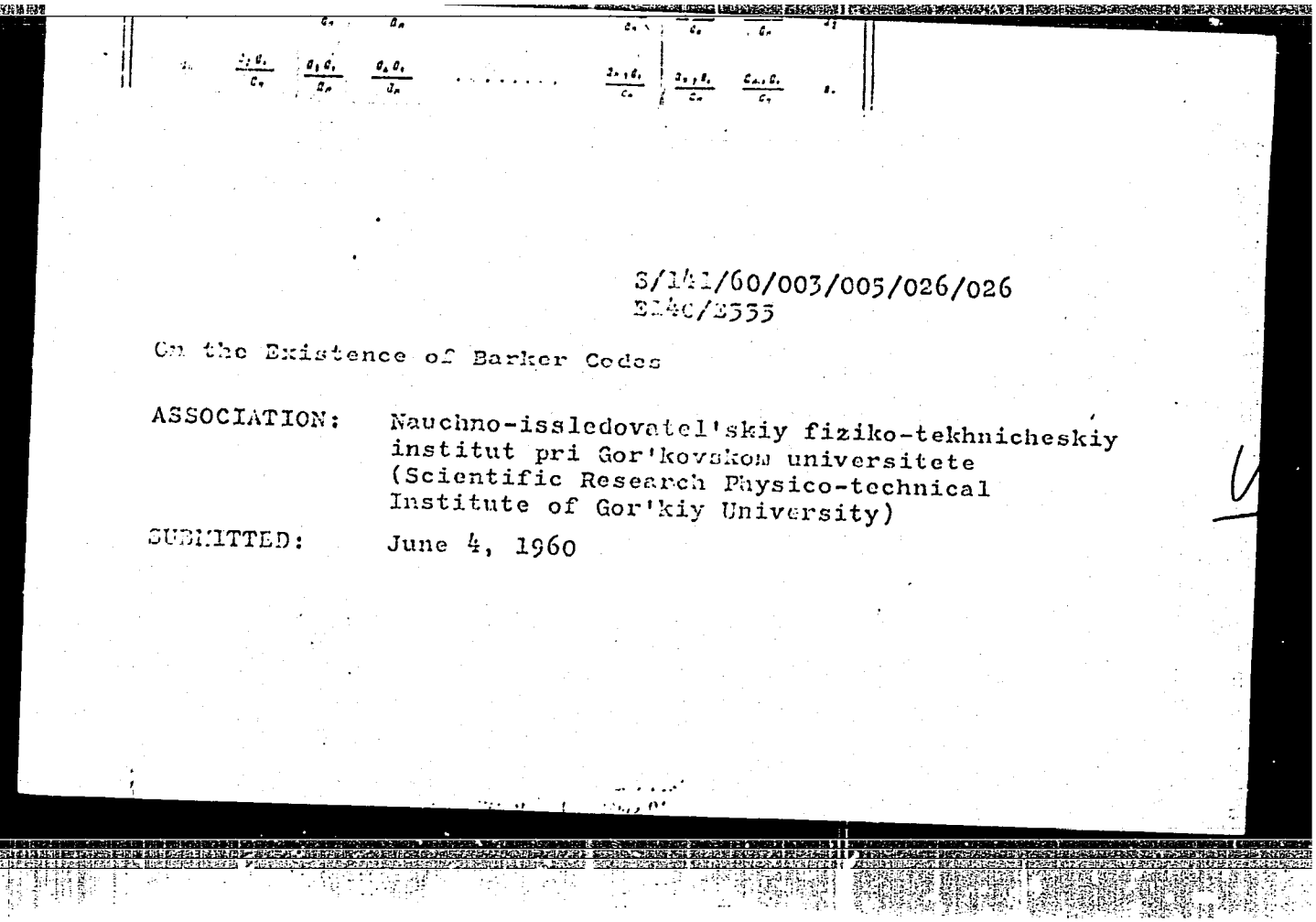
Card 2/4

Card 3/4

S/141/60/003/005/026/026
E140/E335

On the Existence of Barker Codes





S/141/60/003/005/026/026
E140/E555

On the Existence of Barker Codes

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom universitete (Scientific Research Physico-technical Institute of Gor'kiy University)

SUBMITTED: June 4, 1960

YAM'POLSKAYA,T.A., GURTOVA,G.K., GUREVICH,L.V., MURZAYEVA,L.B., SELETSKAYA,L.I.

Investigation of the Interrelationships Underlying Color and Space Vision and Application of Results Obtained in Increasing the Effectiveness of Road Signs

Trudy Instituta Biologicheskoy Fiziki, No 1, 1956, p49
S916, 5 Mar 1956, p 49

BITKINA, L.N.; FEDOSYUK, R.Ya.; LOBKO, M.A.; MIKERINA, N.Ya.; GLUKHOVTSEVA, Z.N.; RUMANOVA, R.G.; VIL'SHANSKAYA, F.L.; MATVEYEVA, V.N.; YAMPOL'SKAYA, V.A.; VARSHAVSKIY, E.I.

Outbreak of salmonellosis. Zhur. mikrobiol. epid. i immun. 31 no.2: 99-100 D '60. (MIRA 14:6)

(SALMONELLA)

YAMPOL'SKAYA, V. D.

PA 67T86

USSR/Medicine - Tuberculosis, Pulmonary Mar/Apr 1948
Medicine - Tuberculosis, Surgery in

"Alcoholization of the Diaphragmal Nerve During Primary Pneumonia in Juveniles and Adults," V. D. Yampol'skaya, Surgical Clinic, Tuberculosis Inst, Acad Med Sci USSR, 7 pp

"Problem Tuberk" No 2

Operations on the diaphragmal nerve in 30 cases suffering from primary tubercular pneumonia had therapeutic results in 26 cases. Determined that alcoholization of subject nerve is equivalent to surgical removal. Deputy Chief, Surgical Clinic, Tuberculosis Inst: Prof N. G. Stoyko. Dir, Tuberculosis Inst, Acad Med Sci USSR: Z. A. Lebedev.

67T86

YAMPOL'SKAYA, V. D.

Yampol'skaya, V. D. "Histological changes in the diaphragmal and vagus nerves in tuberculosis patients," Byulleten' In-ta tuberkulesa Akad. med. nauk SSSR, 1949, No..1, p. 20-30.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 18, 1949).

YAMPOL'SKAYA, V. D.

OYFEBACH, M.I.; ELINSON, F.L.; SHATALOVA, O.S.; MAZINA, Ye.G.; YAMPOL'SKAYA, V.D.

Incidence of healing in primary tuberculosis in adolescents and adults. Prob. tuberk., Moskva no.2:31-36 Mr-Ap '50. (CLML 19:3)

1. Of the Institute of Tuberculosis of the Academy of Medical Sciences USSR (Director -- Z.A.Lebedeva; Scientific Director -- Prof. A.Ye.Babukhin).

YAMPOL'SKAYA, V.D.

IA'POL'SKAIA V. D.

Pnevmolis pri neeffektivnom iskusstvennom pnevmotoraksse. [Pneumonolysis in ineffective artificial pneumothorax] Prob. tuberk., Moskva No. 2 Mar-Apr 51 p. 50-4.

1. Of the Surgical Clinic (Head--Stalin Prize Winner Prof. N. G. Stoyko, deceased), Institute of Tuberculosis of the Academy of Medical Sciences USSR (Director--Z. A. Lebedeva; Scientific Supervisor--Prof. A. Ye. Rabukhin).
CLML Vol. 20, No. 10 Oct 1951

YAMPOL'SKAYA, V.D.

Inter-Province conference on tuberculosis in Novosibirsk. Probl. tub. no.2:74-76 Mr-Ap '54. (MLRA 7:5)
(TUBERCULOSIS)

USSR / Morphology of Man and Animals. Nervous System. S-1

Abs Jour : Ref Zhur - Biol., No 5, 1958, No 21686

Author : Yampol'skaya, V. D.
Inst : Not given
Title : Morphologic Changes in Some Parts of the Nervous System Following Alcoholization of the Phrenic Nerve.

Orig Pub : Eksperim. Khirurgiya, 1956, No 5, 38-44.

Abstract : Following administration of 1 - 1.5 ml. of 96° alcohol, deep dystrophic changes took place in the phrenic nerve: various degrees of demyelinization of the fibers and structural changes in the axons (unequal impregnation with silver, tenioid swelling, appearance of vacuoles, fragmentation and granular degenaration). The most pronounced changes* were reversible and reconstructive processes were completed before the 6th post-operative month. Alcoholization of the phrenic nerve did not constitute a local interference, the

* . observed on the 20th-30th day.

Card 1/2

Inst. Tuberculosis, Acad Med Sci USSR

YAMPOL'SKAYA, V.D., kandidat meditsinskikh nauk

Extrapleural pneumolysis in ineffective artificial pneumothorax.
Khirurgiia 32 no.8:13-18 Ag '56. (MLRA 9:12)

1. Iz khirurgicheskogo otdeleniya (zav. - prof. L.K.Bogush) Instituta tuberkuleza AMN SSSR (dir. - Z.A.Lebedeva)
(COLLAPSE THERAPY
pneumolysis, extrapleural)

YAMPOL'SKAYA, V.D., kand.med.nauk

Method for the interruption of extrapleural pneumothorax.
Probl.tub. 37 no.8:58-64 '59. (MIRA 13:6)

1. Iz khirurgicheskogo otdeleniya (zav. - chlen-korrespondent AMN SSSR prof. L.K. Bogush) Instituta tuberkuleza AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. N.A. Shmelev).
(PNEUMOTHORAX ARTIFICIAL)

YAMPOL'SKAYA, V.D., kand.med.nauk

Conditions of the bronchial tree according to bronchographic data in patients following termination of extrapleural pneumothorax and oleothroax. Sov. med. 24 no. 5:61-68 My '60. (MIRA 13:10)

1. Iz khirurgicheskogo otdeleniya (zav. - chlen-korrespondent AMN SSSR prof. L.K. Bogush) Instituta tuberkuleza AMN SSSR (direktor - chlen-korrespondent AMN SSSR prof. M.A. Shmelev).
(PNEUMOTHORAX) (BRONCHI--RADIOGRAPHY)

YAMPOL'SKAYA, V. D., Doc Med Sci (diss) -- "Extrapleural pneumo- and oleothorax in various localizations of tuberculosis of the lungs and the free pleural cavity". Moscow, 1960. 16 pp (Acad Med Sci USSR), 200 copies (KL, No 15, 1960, 139)

YAMPOL'SKAYA, V.D., doktor med.nauk

Method for interrupting an extrapleural oleothorax. Probl.tub. no.8:37-43 '61. (MIRA 15:5)

1. Iz khirurgicheskoy kliniki Instituta tuberkuleza AMN (zav. khirurgicheskoy klinikoy - chlen-korrespondent AMN SSSR prof. L.K. Bogush, dir. - chlen-korrespondent AMN SSSR prof. N.A. Shmelev).

(OLEOTHORAX)

YAMPOL'SKAYA, Valentina Dmitriyevna; AVERBAKH, M.M., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Extrapleural pneumothorax and oleothorax in lung tuberculosis] Ekstraplevral'nyi pnevmotoraks i oleotoraks pri tuberkuleze legkikh. Moskva, Medgiz, 1963. 202 p. (MIRA 16:5)
(TUBERCULOSIS) (PNEUMOTHORAX) (OLEOTHORAX)

YAMPOL'SKAYA, V.D., doktor med. nauk

Residual roentgenotomographic changes in pulmonary tissue follwing discontinuace of extrapleural pneumo- and oleo-thorax. Probl. tub. 41 no.3: 84'63. (MIRA 16:9)

1. Iz khirurgicheskogo otdeleniya (zav. - prof. T.N. Khrushchova) TSentral'nogo instituta tuberkuleza Ministerstva zdravookhraneniya SSSR, Moskva.
(LUNGS--RADIOGRAPHY) (PNEUMOTHORAX)
(OLEOTHORAX)

YAMPOL'SKAYA, V.D.

Bronchoangiographic parallels in cavernous tuberculosis of the lungs. Grudn. khir. 5 no.3:70-74 My-Je'63 (MIRA 17:1)

1. Iz II khirurgicheskogo otdeleniya (zav. prof. T.N. Khrushchova) Instituta tuberkuleza (dir. - deystvitel'nyy chlen AMN SSSR) prof. N.A. Shmelev) Ministerstva zdravookhraneniya SSSR. Adres avtora: Moskva 128, platforma Yauza, Institut tuberkuleza.

KHURAMOVICH, N.I.; YAMPOL'SKAYA, V.D.

Angiography and hemodynamics of the pulmonary circulation in tuberculosis of the lungs. Sov. med. 27 no.3:48-53 Mr '64. (MIRA 17:11)

1. Khirurgicheskoye otdeleniye (rukovoditel' - doktor med. nauk P.V. Skaldin) Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta (dir. - prof. I.G. Lagunova) Ministerstva zdravookhraneniya RSFSR i Institut tuberkuleza (dir. - chlen-korrespondent AMN SSSR prof. N.A. Shmelev) AMN SSSR, Moskva.

YAMPOL'SKAYA, V.D., doktor med.nauk; KHURAMOVICH, N.I., kand.med.nauk

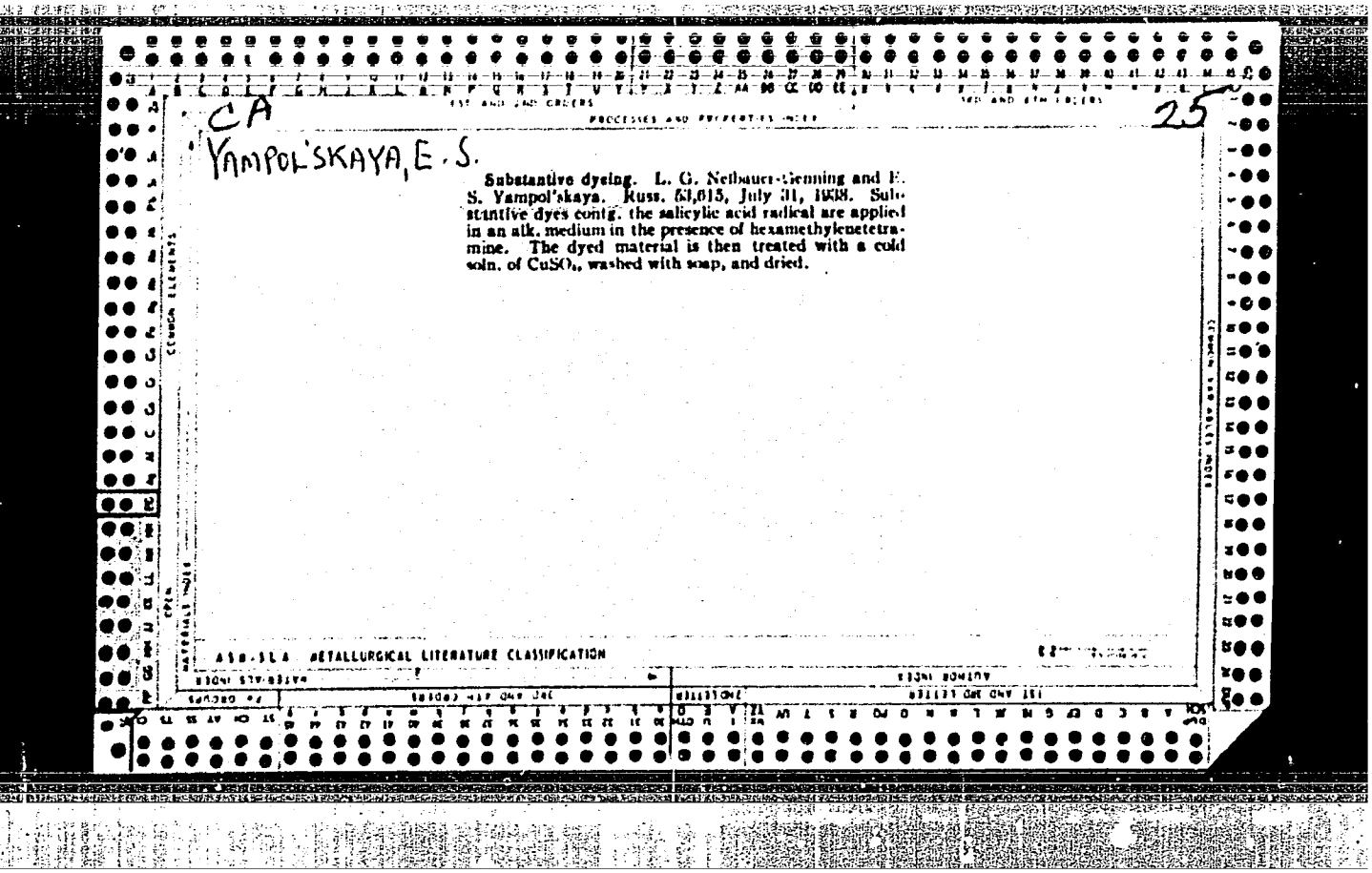
Some hemodynamic indices in the lesser circulation in pulmonary tuberculosis. Probl. tub. 41 no.10:54-58 '63. (MIRA 17:9)

1. Iz TSentral'nogo instituta tuberkuleza Ministerstva zdravookhraneniya SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.A. Shmelev) Ministerstva zdravookhraneniya SSSR i Instituta grudnoy khirurgii (dir. - prof. S.A. Kolesnikov) AMN SSSR.

YAMPOL'SKAYA, Ye.

Headquarters of popular initiative. Sov. profsoiuzy 19 no.18: 8-10 S '63. (MIRA 16:12)

1. Predsedatel' postoyanno deystvuyushchego proizvodstvennogo soveshchaniya Frunzenskoy pryadil'no-tkatskcy fabriki.



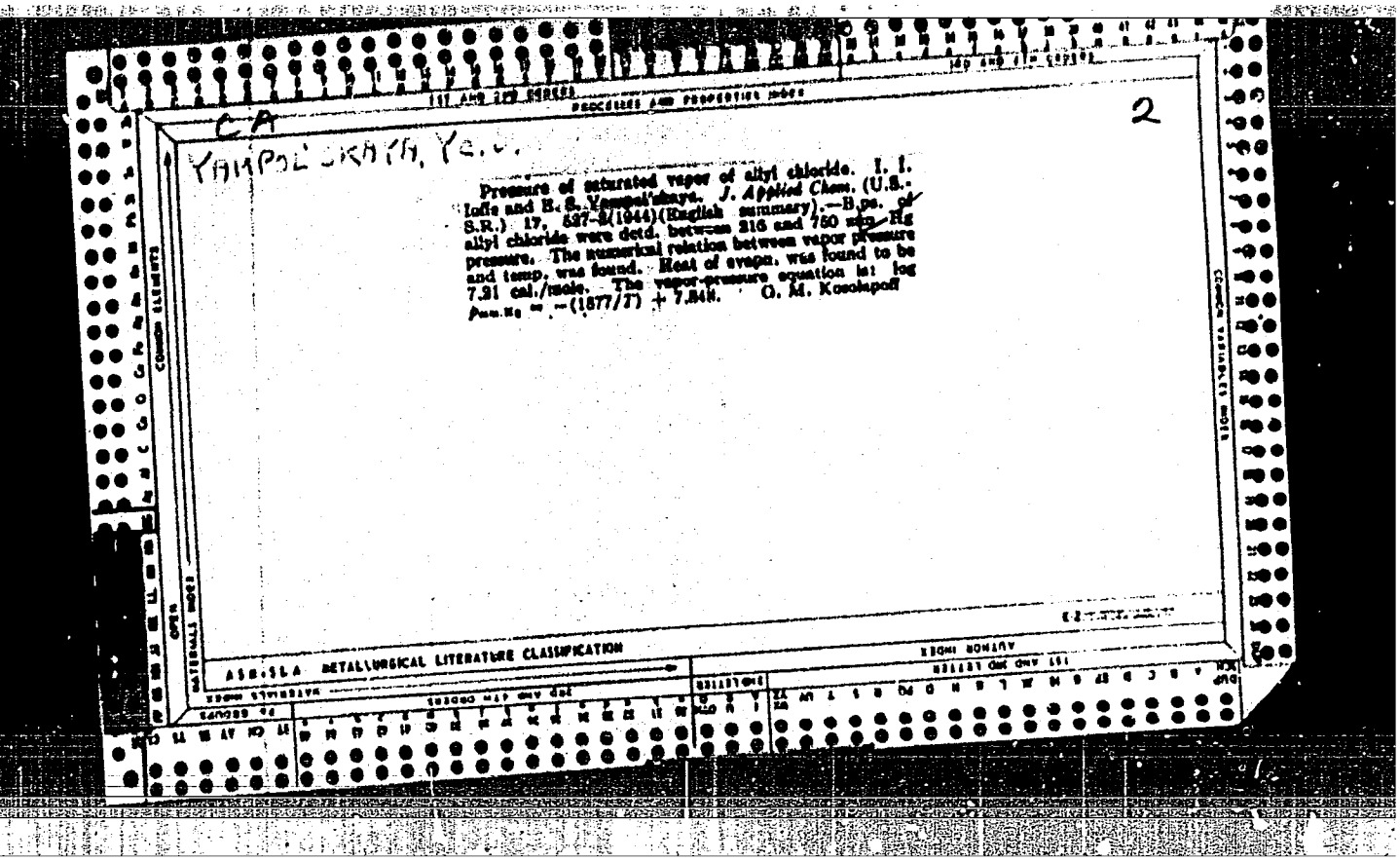
CA

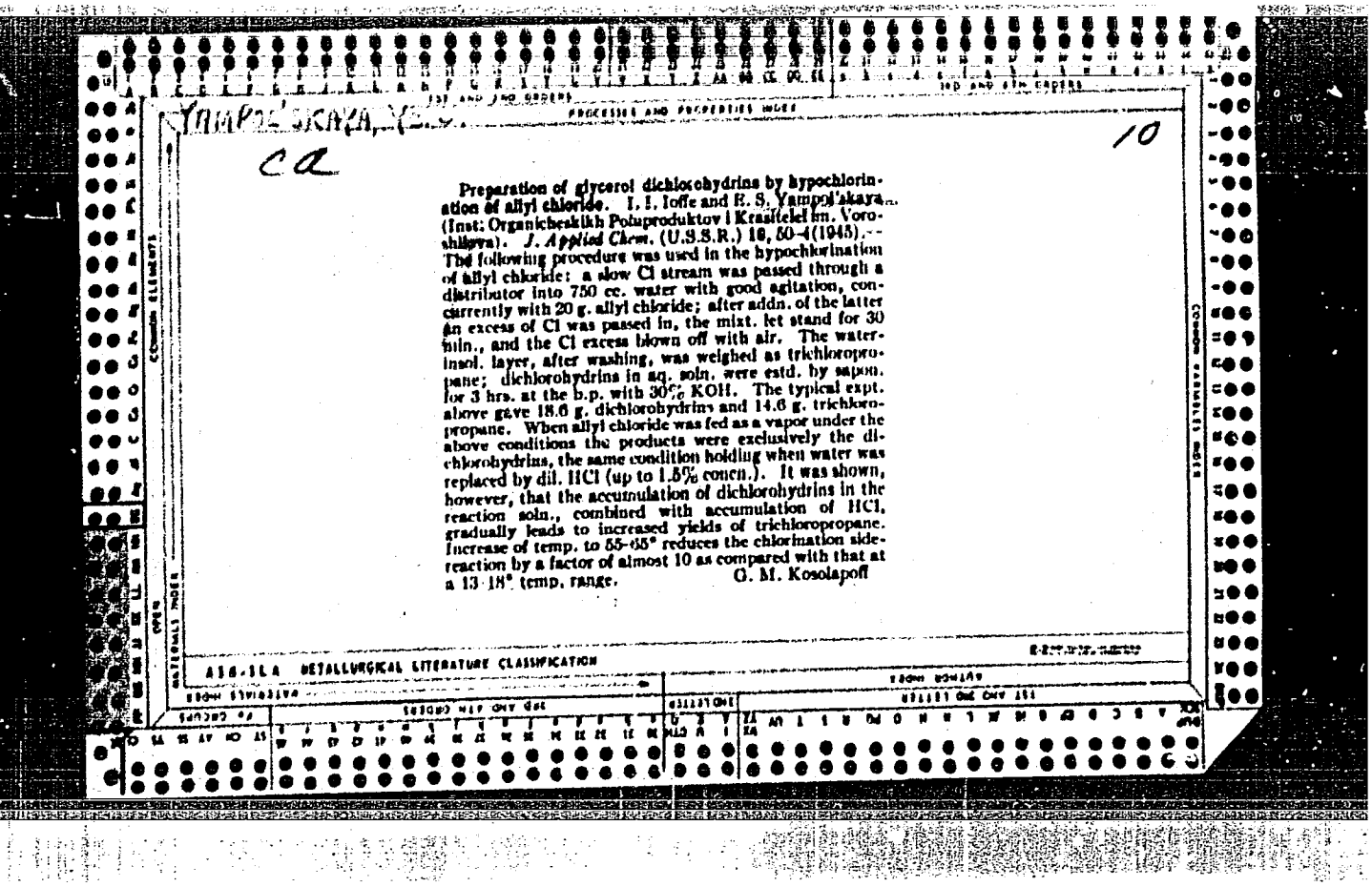
25

YAMPOL'SKAYA, E. S.

Substantive dyeing. L. G. Neibauer-Glenning and E. S. Yampol'skaya. Russ. 61,615, July 31, 1958. Substantive dyes contg. the salicylic acid radical are applied in an alk. medium in the presence of hexamethylenetetramine. The dyed material is then treated with a cold soln. of $CuSO_4$, washed with soap, and dried.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION





YAMPOL'SKAYA, Ye. Ya.

CA

10

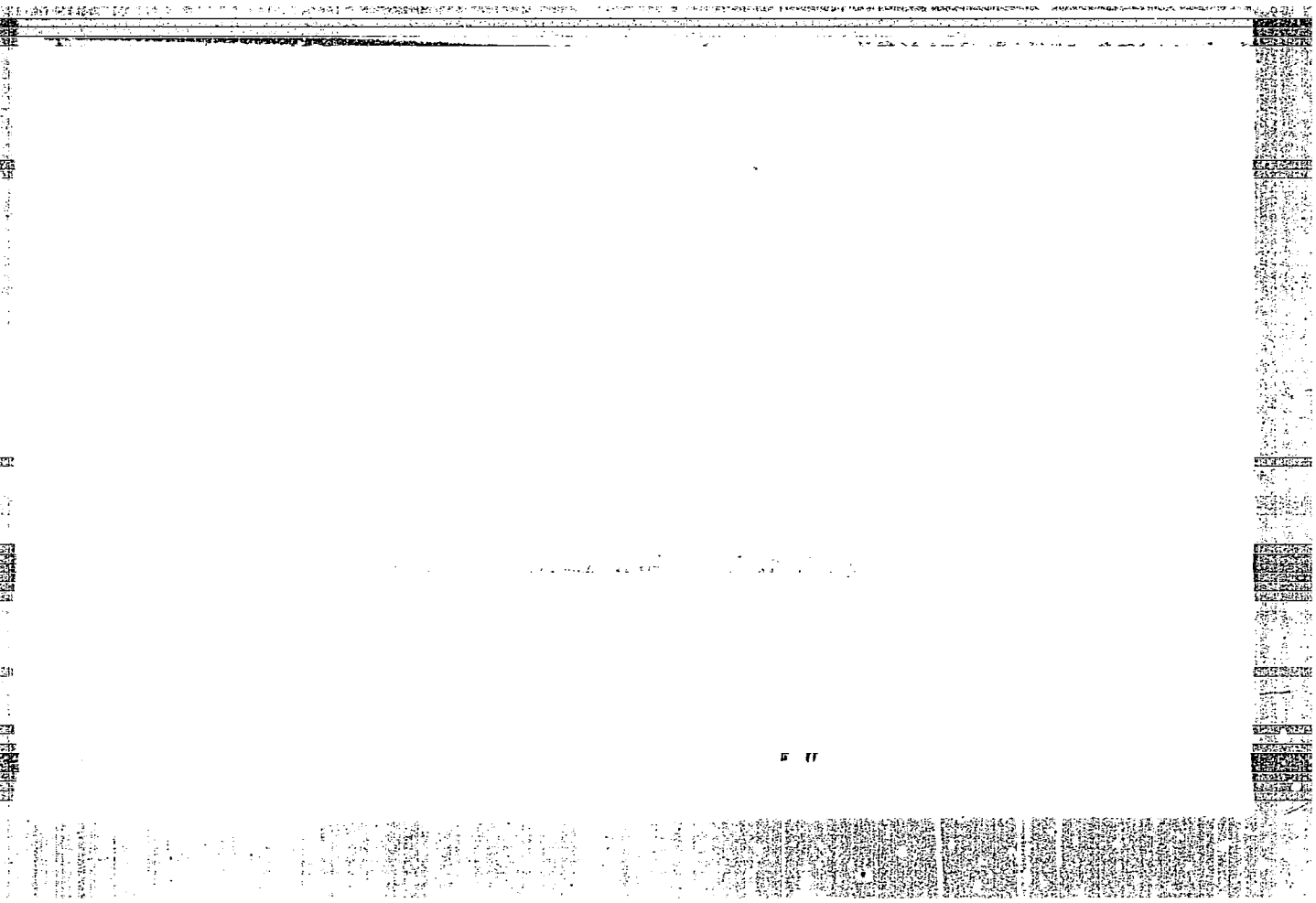
Preparation of glycerol dichlorohydrins by hypochlorination of allyl chloride. I. I. Ioffe and E. S. Yampol'skaya (Inst. Organicheskikh Poluproduktov i Krasitelei im. Voroshilova). *J. Applied Chem.* (U.S.S.R.) 18, 50-4(1945).—The following procedure was used in the hypochlorination of allyl chloride: a slow Cl stream was passed through a distributor into 750 cc. water with good agitation, concurrently with 20 g. allyl chloride; after addn. of the latter an excess of Cl was passed in, the mixt. let stand for 30 min., and the Cl excess blown off with air. The water-insol. layer, after washing, was weighed as trichloropropane; dichlorohydrins in aq. soln. were estd. by sapon. for 3 hrs. at the b.p. with 30% KOH. The typical expt. above gave 18.6 g. dichlorohydrins and 14.6 g. trichloropropane. When allyl chloride was fed as a vapor under the above conditions the products were exclusively the dichlorohydrins, the same condition holding when water was replaced by dil. HCl (up to 1.5% concn.). It was shown, however, that the accumulation of dichlorohydrins in the reaction soln., combined with accumulation of HCl, gradually leads to increased yields of trichloropropane. Increase of temp. to 55-65° reduces the chlorination side-reaction by a factor of almost 10 as compared with that at a 13-18° temp. range. G. M. Kosolapoff

YAMPOL'SKAYA, Ye. S.: FODIMAN, I.V.

Dyes and Dyeing - Rayon

Dyestuff for acetate rayon and for capronic fiber.
Tekst. prom. 12 no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.



YAMPOL'SKAYA, Ye.S.; FODIMAN, I.V.

Determining the rate of exhaustion of a dyestuff. Tekst.prom. 18 no.4:28-31 Ap '58. (MIRA 11:4)
(Dyes and dyeing--Chemistry)

YAMPOL'SKAYA, Ye.S.; FODIMAN, I.V.

Absorbability of dyes by capron for acetate silk. Org. poluprod. i kras. no.2:164-167 '61. (MIRA 14:11)
(Nylon) (Rayon)

ACCESSION NR: AP4033118 S/0120/64/000/002/0093/0095

AUTHOR: Maly*kh, L. Ya.; Maly*kh, N. I.; Perepelkin, N. F.; Yampol'skiy, Ye. S.

TITLE: Velocity phasemeter for 8-mm band

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 93-95

TOPIC TAGS: phasemeter, 8 mm band phasemeter, superheterodyne phasemeter, plasma, plasma density, density phasemeter

ABSTRACT: A velocity superheterodyne phasemeter operating on the 8-mm wavelength is briefly described. It is intended for (a) measuring the time-average density of plasma by the phase of a signal passing through the plasma and (b) observing movements of the critical-density plasma surface by the phase of the reflected signal. The phasemeter error is 7° plus 1.5° or less due to discrepancies associated with the distance between the meter and the plasma

Card 1/2

ACCESSION NR: AP4033118

outfit. Minimum readable phase shift, ~10°; max permissible rate of change of the measurand, 0.2 πrad/microsec; information about the measurand is delivered every two microsec. A block diagram, a circuit diagram of the intensifier-pulse shaper, and a circuit diagram of the sawtooth-voltage shaper are supplied. "L. I. Kompaniyets and G. V. Kubitskiy took part in the development of the phasemeter." Orig. art. has: 4 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut GKAE SSSR (Physico-Technical Institute, GKAE SSSR)

SUBMITTED: 21May63 / ATD PRESS: 3073 ENCL: 00

SUB CODE: EC NO REF SOV: 001 OTHER: 001

Card 2/2

SOLNTSEV, A.M., kand.med.nauk, YAMPOL'SKAYA, Z.K.

Surgery for lacrimal fistulas. Vrach.delo no.4:425-427 Ap'58 (MIRA 11:6)

1. Kafedra chelyustno-litsevoy khirurgii (zav. - prof. M.M. Velikanova) Kiyevskogo instituta usovershenstvo-vaniya vrachey.
(SALIVARY GLANDS--SURGERY)
(FISTULA)

YAMPOL'SKIY, A. (Moskva).

Power supply for television amplitude limiters. Radio no.11:38 N '56. (MLRA 9:12)

(Television--Apparatus and supplies)

YAMPOL'SKIY, A.

107-57-5-49/63

AUTHOR: Yampol'skiy, A., Vilkov, A. (Moscow)

TITLE: Sound System of a One-Channel TV Set
(Zvukovoy trakt odnokanal'nogo televizora)

PERIODICAL: Radio, 1957, Nr 5, p 44 (USSR)

ABSTRACT: A three-tube f-m circuit for a single-channel tv sound system is described. The circuit is similar to one described in "Radio" 1956, Nr 5, under the title "Detektor dlya priyema ChM signalov", but differs in substituting the Soviet type 6Zh8 tube for a foreign (type 6BN6) tube. The a-f band is claimed to be 100 to 7,000 cps with 3 db irregularity around 1,000 cps. Output power 2 w at 7% distortion. Instructions for alignment and tuning given.

There are one figure and one Soviet reference

AVAILABLE: Library of Congress

Card 1/1

YAMPOL'SKIY, A., inzh.; POLYANIN, A., inzh.

Strive for wider use of cement-clay mortars. Na stroi. Mosk. 2 no.9:28 S '59. (MIRA 13:2)

1.Trest Mosstroysnab No.1.
(Mortar)

YAMPOL'SKIY, A., inzh.

Use cement more economically and efficiently. Na stroi. Mosk. 2 no.5:18-19 My '59. (MIRA 13:1)

1.Trest Mosstroysnab No.1.
(Cement)

YAMPOL'SKIY, A. D.

USSR/Oceanography - Currents, Convection Sep/Oct 48

"Convection Currents Provided by Thermal Processes in a Sea," A. D. Yampol'skiy

"Meteorol i Gidrol" No 5, pp 63-66

Offers theoretical calculations and considerations to disprove opinion held by many that most currents found in an ocean are provided mainly by temperature changes. Submitted 27 Jun 48.

[redacted] 166T92

Geophysics - Physics of the Sea

Card 1/1 : Pub. 45-6/12 FD-1718

Author : Yampol'skiy, A. D.

Title : On the dependence of wave element distribution parameters upon dispersion, wind velocity and the duration of its action

Periodical : Izv. AN SSSR, Ser. geofiz., 156-165, Mar-Apr 1955

Abstract : The author examines the statistical picture of maritime excitation. Starting from the hypotheses: a) the wave length distribution function depends only on one parameter and b) there is a functional dependence between the height and length of a wave, he derives an equation for the determination of the distribution parameter as a function of the wind velocity, the duration of its action and dispersion. In a special case the solution of the equation is in close agreement with observations. Using the dependence of the wave length on the period, distribution velocity and height, a distribution function of these elements is derived. A means of forecasting wave element distribution parameters for a given wind field is cited.

Institution : Institute of Oceanology, Academy of Sciences USSR

Submitted : March 31, 1954

SOV/124-58-1-669

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 83 (USSR)

AUTHOR: Yampol'skiy, A. D.

TITLE: Some Methodological Problems of the Use of Aerial Photography in the Investigation of Ocean Waves (Nekotoryye voprosy metodiki primeneniya aerofotos"yemki dlya issledovaniya morskogo volneniya)

PERIODICAL: Tr. In-ta okeanol. AN SSSR, 1956, Vol 19, pp 129-143

ABSTRACT: An aerial-photography technique for ocean waves is outlined; a method for the determination and evaluation of wave elements from aerial photographs is described. Bibliography: 6 references.

Ya. I. Sekerzh-Zen'kovich

Card 1/1

S/049/60/000/007/008/009/XX
E031/E335

AUTHOR: Yampol'skiy, A.D.

TITLE: On the Application of Harmonic Analysis to the Analysis of Data in Hydrological Observations

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, No. 7, pp. 1069 - 1071

TEXT: The two basic difficulties are, firstly, shortage of data and, secondly, the occurrence of two or more oscillations with nearly equal periods. If we assume that the required function has the form:

$$f(t) = A \cos (\omega_1 t + \varphi) + B \cos (\omega_2 t + \Psi)$$

(where ω_1 and ω_2 are known), then the first Fourier coefficients are given by the expressions:

Card 1/4

S/049/60/000/007/008/009/XX
E031/E335

On the Application of Harmonic Analysis to the Analysis of Data in Hydrological Observations

$$a_1 = \frac{2}{T_1}\int_0^{T_1} f(t)\cos \omega_1 t\,dt; \quad b_1 = \frac{2}{T_1}\int_0^{T_1} f(t)\sin \omega_1 t\,dt$$

where T_1 is the period corresponding to the frequency ω_1.
If the expression for $f(t)$ is substituted and the integrations effected, we obtain two equations for four unknowns:

$$\begin{aligned} a_1 &= A\cos\varphi + \alpha B\cos\Psi - \beta B\sin\Psi, \\ b_1 &= -A\sin\varphi + \gamma B\cos\Psi - \delta B\sin\Psi \end{aligned} \qquad (3)$$

since the quantities a_1 and b_1 are assumed known from the ordinary methods of numerical harmonic analysis. Equations

Card 2/4

S/049/60/000/007/008/009/XX
E031/E335

On the Application of Harmonic Analysis to the Analysis of Data in Hydrological Observations

similar to Eq. (3) are written for each segment of the range of observations. The phase difference must be taken into account. For the n-th segment it is given by Eq. (4a). If we introduce this and write the successive expressions for a_{1n}, a_{1n+1}, b_{1n} and b_{1n+1}, we now have four equations for the four unknowns A, B, φ and Ψ, which can be solved by the usual methods. The method is illustrated with an example. The second oscillation is only determined with an accuracy of 9%, due to the occurrence of quantities of nearly equal magnitude and opposite sign in the calculations but the answer is satisfactory in view of the accuracy of the observations. There is 1 table.

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S/049/60/000/007/008/009/XX
E031/E335

On the Application of Harmonic Analysis to the Analysis of Data in Hydrological Observations

ASSOCIATION: Akademiya nauk SSSR Institut okeanologii (Academy of Sciences of the USSR, Institute of Oceanology)

SUBMITTED: November 24, 1959

Card 4/4

YAMPOL'SKIY, A.D.

Variations of hydrological events with an inertial period.
Izv. AN SSR. Ser. geofiz. no. 3:445-452 Mr '61. (MIRA 14:2)

1. Institut okeanologii AN SSSR.
(Oceanography)

YAMPOL'SKIY, A. D.

Internal waves in the northeastern Atlantic Ocean. Trudy Inst. okean. 56:229-240 '62. (MIRA 15:10)

(Atlantic Ocean--Waves)

YAMPOL'SKIY, A.D.

Methodology of calculating inertial fluctuations of hydrologic elements. Trudy Inst. okean. 66:142-149 '63. (MIRA 16:10)

BELOUSOV, I.M.; KOZLOV, N.M.; YAMPOL'SKIY, A.D.

New methodology of statistical treatment of materials in measuring the sea bottom. Okeanologiia 5 no.1:156-165 '65. (MIRA 18:4)

1. Institut okeanologii AN SSSR.

YAMPOL'SKIY, A.D., kand. geogr. nauk

What is Gulf Stream? Zem.i vsel 1 no.5:53-56 S-O '65.
(MIRA 18:11)

YAMPOL'SKIY, A.D.

Spectral methods of studying oceanographic processes.
Okeanologiia 5 no.5:769-778 '65.

(MIRA 18:11)

1. Institut okeanologii AN SSSR.

L 27151-66 EWT(1) GW
ACC NR: AP6014289 (N) SOURCE CODE: UR/0213/66/006/002/0367/0371

AUTHOR: Belousov, I. M.; Kozlov, N. M.; Yampol'skiy, A. D. 21 B

ORG: Institute of Oceanology, AN SSSR (Institut okeanologii AN SSSR)

TITLE: Method for determining inclination angles of the ocean floor

SOURCE: Okeanologiya, v. 6, no. 2, 1966, 367-371

TOPIC TAGS: oceanography, ocean floor topography, oceanographic instrument, inclination measurement

ABSTRACT: Up to now, inclination angles of the ocean floor have been determined by the tangent of the angle between any two successive depth soundings. The relief profile was approximated by straight lines. Such a method yielded rather approximate angular values, especially considering the errors in measuring the depth and distance between them. It is suggested that bottom relief profiles should be approximated by the second power parabola drawn through five successive points. In the authors' opinion, this method is much more accurate than the previously used approximation by straight lines. The first derivative value is calculated for each of the points. This procedure gives a continuous profile of angles. Use of this method for one profile was presented as an example. Orig. art. has: 2 figures and 6 formulas. [Based on authors' abstract.] [NT]

SUB CODE: 08/ SUBM DATE: none
Card 1/1 BK UDC: 551.462(26)

KRUPYSHEV, N. D.; YAMPOL'SKIY, A. L.

"Examining Norms for Machine Tool and Tool Industry" Stanki i Instrument, 10, No. 4,1939.

[redacted] Report U-1505, 4 Oct 1951

KUZNETSOV, S.I., inzh.; YAMPOL'SKIY, A.L., inzh.

The utilization of coal and peat for power purposes. Torf. prom. 35 no.7: 25-28 '58. (MIRA 11:11)

1. Gosudarstvennyy institut po proyektirovaniyu zavedov torfyanoy promyshlennosti.
(Peat) (Coal)

YAMPOL'SKIY, A.I.

C-reactive proteins; a review. Zhur.mikrobiol.epid. i immun. 29 no.6:82-87 Je '58 (MIRA 11:7)

1. Iz kafedry mikrobiologii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(BLOOD PROTEINS,
C-reactive, review (Rus))

SLEPTSOV, A.P.; YAMPOL'SKIY, A.L.; PASHININ, P.M.

C-reactive protein in rheumatism in children. Pediatriia 37 no.4:27-30 Ap '59. (MIRA 12:6)

1. Iz kliniki pediatrii (zav. - deystvitel'nyy chlen AMN SSSR prof. M.S.Maslov) i kafedry mikrobiologii (zav. - prof. A.A. Sinitskiy) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

(RHEUMATIC FEVER, blood in
C-reactive protein (Rus))
(BLOOD PROTEINS, in various dis.
rheum. fever (Rus))

CHISTOVICH, A.S.; SHVEDSKAYA, A.G.; YAMPOL'SKIY, A.L.

Study of C-reactive protein in infectious psychoses. Zhur. nerv. i psikh. 60 no. 12:1623-1629 '60. (MIRA 14:4)

1. Kafedry psikhiatrii (zav. - prof. A.S. Chistovich) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova, Leningrad.
(GLOBULIN) (PSYCHOSES)

YAMPOL'SKIY, A.L., inzh.; PISARYUK, L.P., inzh.

Methods for determining the degree of mechanization in the peat industry. Torf. prom. 40 no.7:12-15 '63. (MIRA 17:1)

1. Gosudarstvennyy proyektnyy institut po kompleksnomu ispol'zovaniyu torfa v narodnom khozyaystve.

YAMPOL'SKIY, A. M.

Gal'vanostegiia v protsessakh termoobrabotki stali. Sverdlovsk, Mashgiz, 1946. 78, [2] p. illus.

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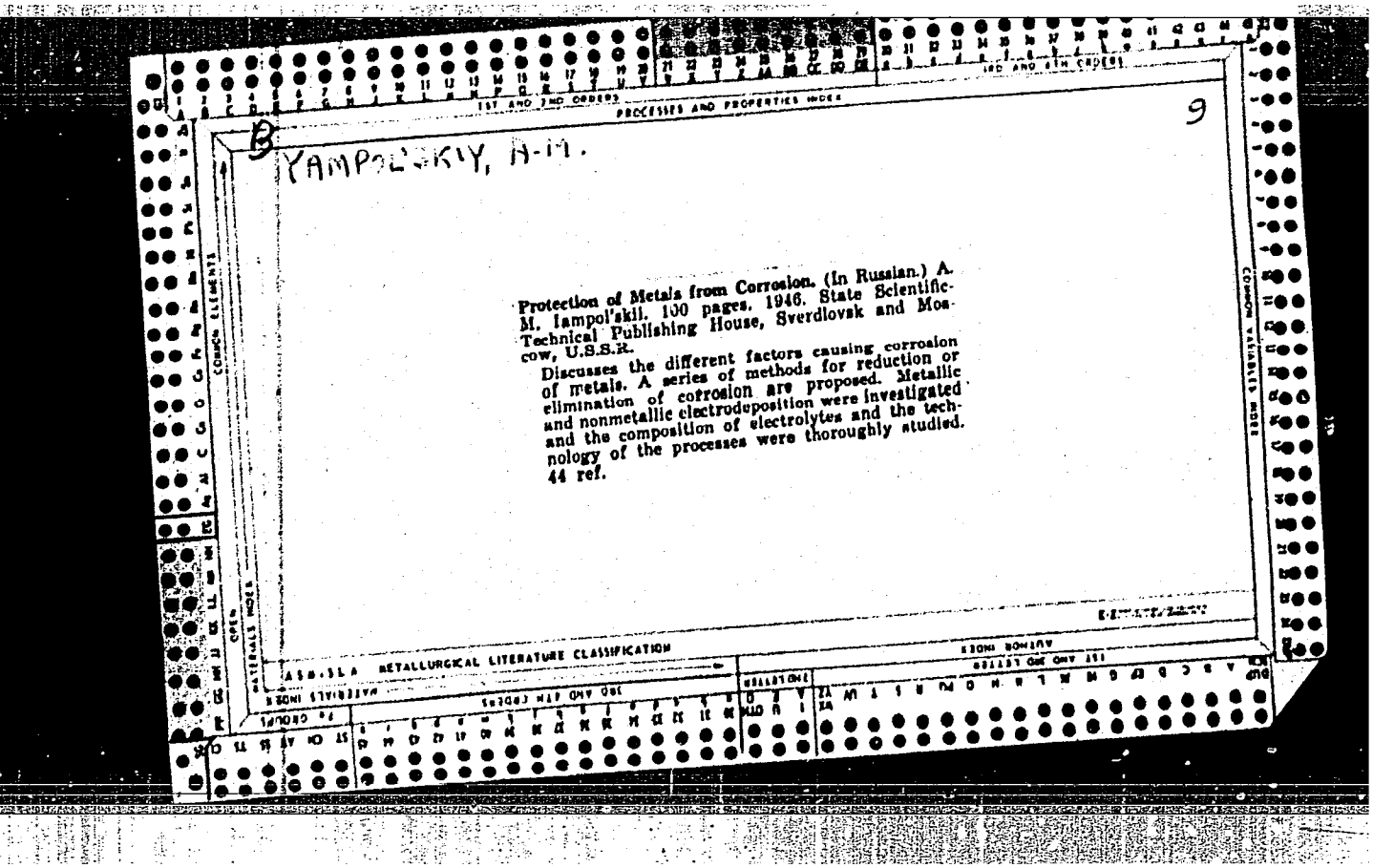
DLC: TS670.I2

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.



YAMPOLSKIY, A. M.

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B-76256

Evaluation B-76256

YAMPOL'SKIY, A.M.

VAYNER, Ya.V., laureat Stalinskoy premii kandidat tekhnicheskikh nauk; DASOYAN, M.A., kandidat tekhnicheskikh nauk; DRINBERG, A.Ya., laureat Stalinskoy premii doktor tekhnicheskikh nauk, professor; TARASENKO, A.A., laureat Stalinskoy premii, inzhener; KHAIN, I.I., inzhener; BOGORAD, I.Ya., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk, retsenzent; SNEDZE, A.A., kandidat tekhnicheskikh nauk, retsenzent; YAMPOL'SKIY, A.M., inzhener, retsenzent; TIKHOMIROV, A.A., inzhener, retsenzent; FEDOT'YEV, N.P., laureat Stalinskoy premii doktor tekhnicheskikh nauk, professor, redaktor; GUREVICH, Ye.S., kandidat tekhnicheskikh nauk, redaktor; DLUGOKANSKAYA, Ye.A., tekhnicheskiy redaktor

[Handbook on protective and decorative coatings] Spravochnik po zashchitno-dekorativnym pokrytiiam. Pod red. N.P.Fedot'eva. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1951. 480 p. [Microfilm] (MLRA 10:7)

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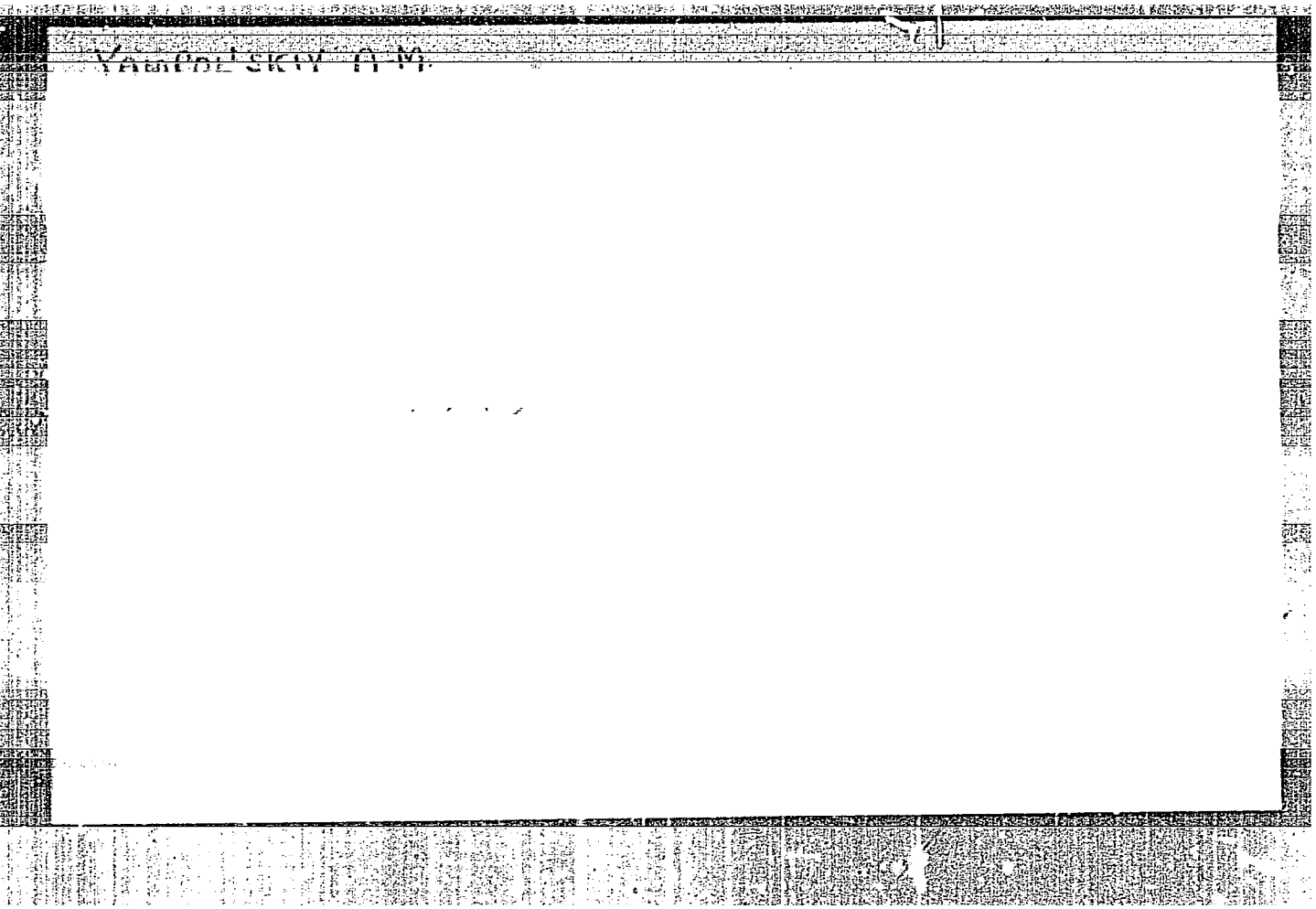

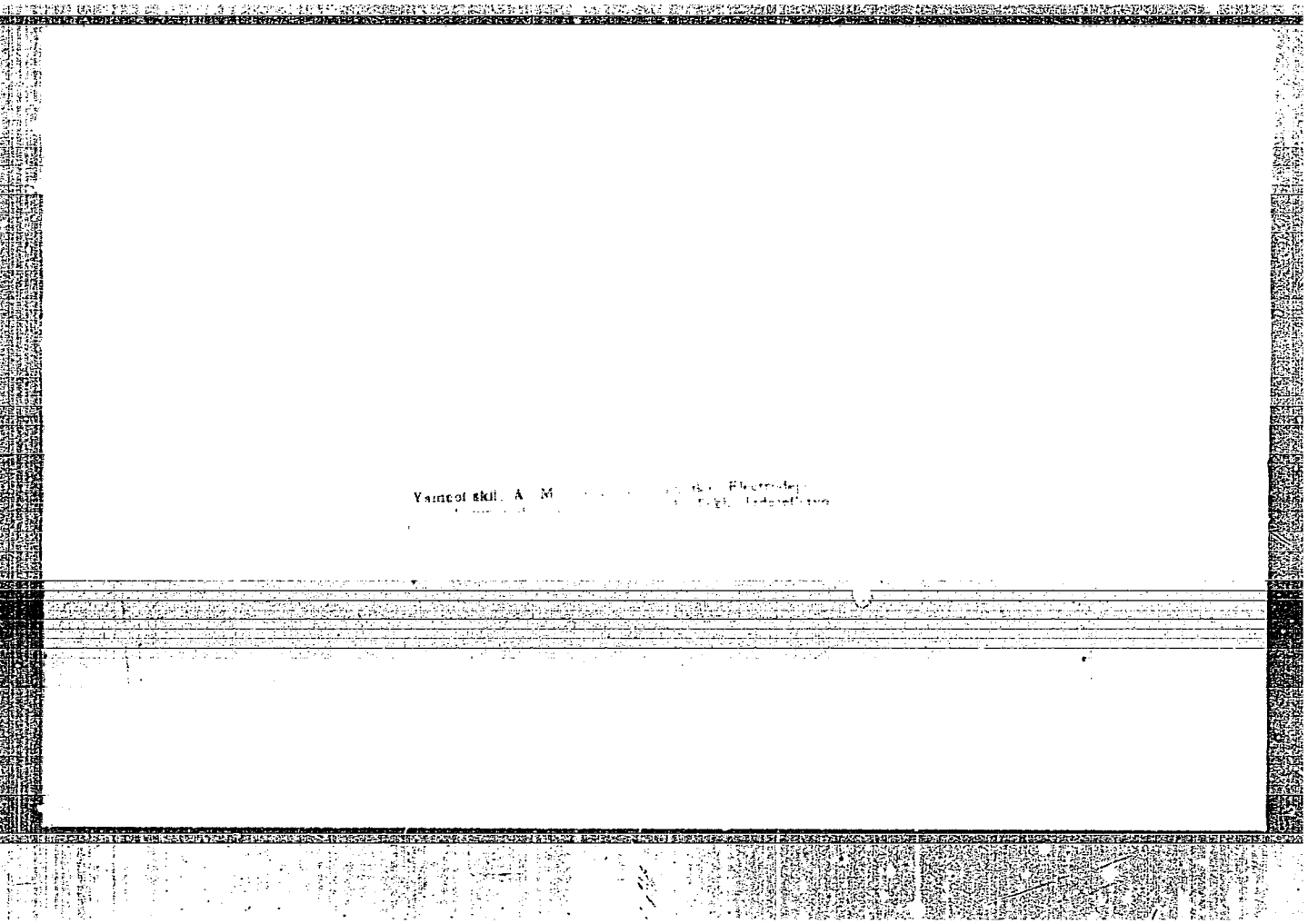

POPILOV, L.Ya.; YAMPOL'SKIY, A.M., inzhener, redaktor.

[Technology of electrolytic metal polishing] Tekhnologiia elektropolirovaniia metallov. Leningrad, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry [Leningradskoe otd-nie] 1953. 254 p.
(MLRA 7:2)
(Metals--Finishing)

IL'IN, Vitaliy Alekseyevich; FEDOROV, V.A., inzh., retsenzent; VYACHESLAVOV, P.M., dots., kand. khim. nauk, red.; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, N.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Tin and lead plating] Luzhenie i svintsevanie. Pod obshchei red. P.M. Viacheslavova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 31 p. (Bibliotechka gal'vanotekhnika, no.4). (Tin plating) (Lead plating) (MIRA 11:9)

VYACHESLAVOV, Petr Mikhaylovich, dots., kand. khim. nauk; FEDOT'YEV, N.P., prof., doktor khim. nauk, retsenzent; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, N.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Alloy plating] Gal'vanicheskie pokrytiia splavami. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 37 p. (Biblio-techka gal'vanotekhnika, no.7). (MIRA 11:9)
(Electroplating)

VYACHESLAVOV, Petr Mikhaylovich, dots., kand. khim. nauk; LANTRATOV, M.F., dots., kand. khim. nauk, retsenzent; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, N.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Fundamentals of electroplating] Osnovnye poniatiia o gal'vanotekhnike. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 38 p. (Bibliotechka gal'vanotekhnika, no.1). (Electroplating) (MIRA 11:9)

PHASE I BOOK EXPLOITATION SOV/3964

Yampol'skiy, Anatoliy Mikhaylovich

Mednenlye i nikelirovaniye (Copper Plating and Nickel Plating) Moscow, Mashgiz, 1958. 41 p. (Series: Bibliotechka gal'vanotekhnika, vyp. 5) 10,000 copies printed. Errata slip inserted.

General Ed.: P. M. Vyacheslavov, Candidate of Chemistry, Docent; Reviewer: Ye. T. Tsay, Engineer; Editorial Board: P. M. Vyacheslavov (Chairman), S. Ya. Grilikhes, Candidate of Technical Sciences, and A. M. Yampol'skiy, Engineer; Ed. of this book: S. Ya. Grilikhes; Managing Ed. for Literature on the Design and Operation of Machinery (Leningrad Division, Mashgiz): F. I. Fetisov, Engineer; Ed. of Publishing House: A. I. Varkovetskaya; Tech. Ed.: L. V. Sokolova.

PURPOSE: This book is intended for skilled workers, laboratory technicians, and foremen of electroplating and electroforming shops.

COVERAGE: The book is the fifth volume of the "Little Library of Electrodeposition" series. It contains technical data on the electrodeposition of copper and nickel and their application in multiple layers, electrolyte

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compositions, electrodepositing conditions, and also on some special technical aspects of individual electrodeposition processes. Some information on finishing copper- and nickel-plated items is given in brief. No personalities are mentioned. There are 27 references, all Soviet.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress (TS670.B6)

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PHASE I BOOK EXPLOITATION SOV/3966

Yampol'skiy, Anatoliy Mikhaylovich

Gal'vanotekhnika dragotsennykh i redkikh metallov (Electroplating With Precious and Rare Metals) Moscow, Mashgiz, 1958. 41 p. (Series: Bibliotechka gal'vanotekhnika, vyp. 7) Errata slip inserted. 8,000 copies printed.

General Ed.: P. M. Vyacheslavov, Candidate of Chemistry, Docent; Reviewer: I. F. Leusskiy, Engineer; Editorial Board: P. M. Vyacheslavov (Chairman), S. Ya. Grilikhes, Candidate of Technical Sciences, and A. M. Yampol'skiy, Engineer; Ed. of this book: S. Ya. Grilikhes; Managing Ed. for Literature on the Design and Operation of Machinery (Leningrad Division, Mashgiz): F. I. Fetisov, Engineer; Ed. of Publishing House: A. I. Varkovetskaya; Tech. Ed.: L. V. Sokolova.

PURPOSE: This book is intended for skilled workers, laboratory technicians, and foremen of electroplating and electroforming shops.

COVERAGE: The book is the eight volume of the "Little Library of Electrodeposition" series. The technology of electrodepositing silver, gold, and other precious and rare metals is discussed. The compositions of electrolytes, electrodepositing conditions, and also special aspects of some

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specific cases of electrodepositing these metals are mentioned. Brief information is given on the deposition of some nonprecious metals (tungsten, molybdenum, bismuth, etc.) and other metals rarely used in electroplating. No personalities are mentioned. There are 30 references: 25 Soviet, 4 German and 1 English.

TABLE OF CONTENTS:

Electroplating With Precious and Rare Metals

AVAILABLE: Library of Congress (TS 670.B6)

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JA/cdw/sfm
8-24-60

YAMPOL'SKIY, M.M.

IL'IN, Vitaliy Alekseyevich; FEDOROV, V.A., inzh., retsenzent; VYACHESLAVOV, P.M., dots., kand. khim. nauk, red.; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, N.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Zinc and cadmium plating] TSinkovanie i kadmirovanie. Pod obshchei red. P.M. Viacheslavova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 44 p. (Bibliotechka gal'vanotekhnika, no.3). (Zinc plating) (Cadmium plating) (MIRA 11:10)

Yampol'skiy, A.M.

BIBIKOV, Nikolay Nikolayevich; NEMTSHVA, F.Ye., inzh., retsenzent; VYACHESLAVOV, P.M., dots., kand. khim. nauk, red.; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, N.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Electroplating with a periodic reverse current] Gal'vanicheskie pokrytiia na toke peremennoi poliarnosti. Pod obshchei red. P.M. Viacheslavova. Moskva, Gos. nauchno-tekhn. izd-vo mashino-stroit. lit-ry, 1958. 47 p. (Bibliotechka gal'vanotekhnika, no.10). (Electroplating) (MIRA 11:9)

YAMPOL'SKIY, A.M.

GRILIKHES, Semen Yakovlevich, kand. tekhn. nauk; KHEYFETS, V.L., kand. tekhn. nauk, retsenzent; VYACHESLAVOV, P.M., dots., kand. khim. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; VASIL'YEVA, V.P., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Preparation of articles for electroplating and finishing of the electroplate] Podgotovka izdelii pered gal'vanicheskimi pokrytiiami i otdelka pokrytii. Pod obshchei red. P.M. Viacheslavova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 60 p. (Bibliotechka gal'vanotekhnika, no.2). (MIRA 11:9)
(Electroplating)

YAMPOL'SKIY, A.M.

GRILIKHES, Semen Yakovlevich, kand. tekhn. nauk,; CHERNOVA, P.L., inzh.; retsenzent; VYACHESLAVOV, P.M., kand. khim. nauk, dots., red.; YAMPOL'SKIY, A.M., inzh., red.; GOFMAN, Ye.K., red. izd-va,; SOKOLOVA, L.V., tekhn. red.

[Protection of metals by means of oxide and phosphate coatings] Zashchita metallov oksidnymi i fosfatnymi plenkami. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 64 p. (Bibliotechka gal'vanotekhnika, no. 9). (MIRA 11:11)
(Protective coatings)

VAYNER, Yakov Vul'fovich; KUSHNAREV, B.P., inzh., retsenzent; VYACHESLAVOV, P.M., dots., kand. khim. nauk, red.; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, N.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Equipment of electroplating shops] Oborudovanie gal'vanicheskikh tsekhov. Pod red. P.M. Viacheslavova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 77 p. (Bibliotechka gal'vano-tekhnika, no.11). (MIRA 11:10)

(Electroplating)

Yampol'skiy, A.M.

CHERKEZ, Mikhail Borisovich; BOGORAD, L.Ya., inzh. retsenzent; VYACHESLAVOV, P.M., dots., kand. khim. nauk, red.; GRILIKHES, S.Ya., kand. tekhn. nauk, red.; YAMPOL'SKIY, A.M., inzh., red.; SIMONOVSKIY, M.Z., red. izd-va; SOKOLOVA, L.V., tekhn. red.

[Chrome and iron plating] Khromirovanie i zheleznenie. Pod red. P.M. Viacheslavova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 84 p. (Bibliotechka gal'vanotekhnika, no.6). (Electroplating) (MIRA 11:9)

KHUGLOVA, Yekaterina Georgiyevna,inzh.; VYACHESLAVOV, Petr Mikhaylovich,dots., kand. khim. nauk,; CHERNOVA, P.L.,inzh.retsenzent,; GRILIKHES, S.Ya.,kand. tekhn. nauk, red.; YAMPOL'SKIY,A.M.,inzh.,red.; VARKOVETSKAYA, A.I.,red. izd-va,; SOKOLOVA, L.V.,tekhn. red.

[Control of plating baths and coatings] Kontrol' gal'vanicheskikh vann i pokrytii. Moskva,Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 107 p. (Bibliotechka gal'vanotekhnika, no. 12). (MIRA 11:12)

(Electroplating)

PHASE I BOOK EXPLOITATION 937

Yampol'skiy, Anatoliy Mikhaylovich

Zashchitnyye pokrytiya metallov (Protective Metal Coating) [Leningrad] Lenizdat, 1958. 134 p. (Series: Opyt novatorov leningradskoy promyshlennosti) 5,000 copies printed.

Ed.: Yemel'yanova, Ye. V. ; Tech. Ed.: Levonevskaya, L. G.

PURPOSE: This book is intended for engineers, technicians, and skilled workers in plating shops.

COVERAGE: The book describes improved methods of chemical and electrochemical plating of metals which were developed by technicians at plants in Leningrad. Composition of electrolytes and operating conditions are indicated, and descriptions are given of equipment and technological aspects of individual processes. There are 29 Soviet references.

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AVAILABLE: Library of Congress (TS670.I27)

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GO/gmp
12-23/58

Yampol'skiy, A.M.

SOV/137-58-8-17675

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 210 (USSR)

AUTHORS: Kurdyumov, G. V., Maksimova, O. P., Nikonorova, A. I. Pavlenko, Z. D., Yampol'skiy, A. M.

TITLE: The Effect of Preliminary Plastic Deformation on Martensite Transformation in Fe-Cr-Ni Alloys (Vliyaniye predvaritel'noy plasticheskoy deformatsii na martensitnoye prevrashcheniye v splavakh Fe-Cr-Ni)

PERIODICAL: Sb. tr. In-t metalloved. i fiz. metallov Tsentr. n.-i. in-ta chernoy metallurgii, 1958, Vol 5, pp 41-55

ABSTRACT: Investigations were performed in order to evaluate the effect of plastic deformation (PD) and subsequent heating on processes of martensite transformation (MT) during cooling, and on isothermal MT in an alloy composed of Kh18N8 (0.03% C, 18.10% Cr, and 8.1% Ni) and Kh17N9 (0.05% C, 17.25% Cr, and 9.16% Ni). The PD was effected by compression of specimens in a press at room temperature, as well as at temperatures of 100 and 175°C. Changes in the ability of austenite (A) to undergo transformations were evaluated by means of a thermomagnetic method involving plotting of martensite cooling curves during

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The Effect of Preliminary Plastic Deformation (cont.)

cooling of the material to -196° followed by heating to a temperature of 20° at a rate of 10°/min. The summary transformation effect obtained as a result of the cooling and heating processes was taken as a criterion of stability of A. After deformation and annealing, the crystalline substructure of the A was characterized by the width of X-ray interference lines. It is established that, depending on the conditions of PD and annealing procedures, the PD may have an activating or a retarding effect on the MT. A small degree of PD extends the temperature range of the MT increases the initial rate of isothermal transformation, and increases the over all quantity of martensite. As the degree of PD and the temperature at which it is accomplished are increased, the PD begins to exert a retarding influence on the ability of A to undergo MT. Annealing of metal in the temperature range between 100° and 400° eliminates the activating effect of a preceding PD without destroying its retarding effect. At PD of a high degree, annealing at temperatures of 100 400° results in an additional improvement of the stability of A. The activation of the MT is affected by stresses which arise during PD; these stresses are restricted to small volumes and are different from stresses of type II, which are determined by the blurring of the interference lines. The retarding action of PD is affected by the breaking up of the zones of coherent dispersion of X-rays, an effect which hampers the formation of martensite nuclei. The activating and retarding

The Effect of Preliminary Plastic Deformation (cont.)

action of PD on the MT is a function not only of the degree of the PD, but of the plastic-elastic properties of the initial phase as well.

1. Chromium-iron-nickel alloys--Analysis
2. Martensite--Transformations
3. Martensite--Deformation
4. Martensite--Temperature factors

M. Sh.

Yampol'skiy, A.M.

SOV/126-6-1-12/33

AUTHORS: Kurdyumov, G. V., Maksimova, O. P., Nikonorova, A. I., Pavlenko, Z. D., and Yampol'skiy, A. M.

TITLE: Influence of Preliminary Plastic Deformation on the Martensitic Transformation in the Alloy Fe-Cr-Ni (Vliyaniye predvaritel'noy plasticheskoy deformatsii na martensitnoye prevrashcheniye v splave Fe-Cr-Ni)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 1, pp 95-105 (USSR)

ABSTRACT: The results are described of experiments carried out for elucidating the finer features of the influence of plastic deformation and subsequent annealing on the martensite transformation in Fe-Cr-Ni alloys of the type Kh18N8. The aim was to establish the activating effect of deformation in such an alloy and to verify the validity of the assumption of the activating influence of stresses on the martensitic transformation of deformed austenite. For this it was necessary to study the character of elimination of the after effects of deformation with gradually increasing annealing temperature; in view of the possible super-position of diffusion processes onto

Card 1/8 the processes of stress elimination during annealing,

such investigations could not be effected on steel. If the assumption on the favourable influence of stresses on the martensitic transformation of deformed austenite would be correct, the effect of activation should be eliminated in the case of heating in the range of relatively low temperatures. Another aim of the described work was to study the influence of deformation on the isothermal martensitic transformation for the purpose of elucidating the characteristic features of the changes in the kinetics caused by the influence of the activating and/or the braking effects of deformation. Since the activating influence of deformation can only be detected in alloys with high elasticity values, it was decided to carry out the experiments on the alloy Kh18N8 (0.03% C, 18.10% Cr, 8.1% Ni) and the alloy Kh17N9 (0.05% C, 17.25% Cr, 9.16% Ni), both of which are similar in composition and as regards the martensitic point. On the alloy Kh18N8 the influence of deformation and subsequent heating for obtaining martensitic transformation during cooling was studied, whilst on the alloy Kh17N9 the influence of deformation on the isothermal

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martensitic transformation was studied. Investigations were carried out on flat 3.5 x 5.5 x 25.5 mm specimens which after manufacture were subjected to diffusion annealing at 1150°C for ten hours. The plastic deformation was effected by compression by means of a press at room temperature, at 100 and at 175°C. Deformation at 100 and 175°C was effected inside a special sleeve fitted with a heater winding ; as a medium for ensuring the temperature of 100°C boiling water was used, whilst deformation at 175°C was effected in glycerine. Evaluation of the change of the ability of the austenite to become transformed into martensite was effected by means of the thermo-magnetic method by plotting the curves of cooling to -196°C and subsequent heating to 20°C with a speed of 10°C/min. As the basic criterion of the stability of the austenite, the total transformation effect was chosen which was obtained as a result of cooling and heating. The change in the fine structure of the austenite during the plastic deformation and during the

 subsequent heating was investigated by the X-ray method

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by measuring the width of the line (311). As a characteristic of the state of the structure of the austenite (Type II stresses, dimensions of the blocks and coherent scattering), the magnitude of physical widening of the (311) austenite lines was chosen. In Fig.1 the transformation of the austenite into martensite during cooling to -196°C and subsequent heating to +20°C is graphed after various degrees of preliminary plastic deformation at room temperature for the alloy Kh18N8; in Fig.2 the same relation is graphed for the case of deformations taking place at 100°C and at 175°C. In Fig.3 the change of the total effect of martensitic transformation as a function of the degree of preliminary plastic deformation is graphed for various temperatures of preliminary deformation for the alloy Kh18N8. In Fig.4 the influence of the annealing temperature on the transformation of the deformed austenite during cooling to -196°C and heating to 20°C is graphed for various degrees of deformation at 100°C (alloy Kh18N8). In Fig.5 the change of the widening of the line (311) of the

austenite, of the total effect of martensitic transformation (during cooling and during heating) and the change of the martensitic point are graphed as functions of the annealing temperature for specimens of the Kh18N8 alloy deformed by 10% at 100°C. In Fig.6 the temperature dependence of the initial speed and the total effect of isothermal martensitic transformation are graphed for non-deformed and deformed (8 and 17%) states for a deformation temperature of 100°C (alloy Kh17N9). It was found that, depending on the conditions of deformation and annealing, plastic deformation can have an activating or a braking effect on the martensitic transformation. Small degrees of deformation activate the transformation, i.e. widen the temperature range of the transformation, bring about an increase of the initial speed of the isothermal transformation and of the total quantity of the martensitic phase. Various changes in the fine crystalline structure of the austenite may lead either to easier formation of martensite nuclei during subsequent cooling or may impede their formation. For small degrees

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of plastic deformation those structural changes will occur to an increasing extent which bring about the formation of germinations. However, even at such degrees of deformation changes occur in the austenite which impede transformation. With increasing degree of deformation and also with increasing deformation temperature, the changes in the structure which bring about braking of the transformations increase in importance. The changes in the fine crystalline structure, which activate the transformation are eliminated at relatively low annealing temperatures at which the width of interference lines does not yet change, i.e. whilst there are still no important changes in the magnitude of the Type II distortions or in the dimensions of the areas of coherent scattering. Changes in the structure braking the formation of germinations are maintained thereby; elimination of these takes place only at higher temperatures corresponding to the region of decrease in the degree of blurring of the lines. It is not possible as yet to establish those details of the fine structure